

ABSTRACT

An x-ray tube emits X-rays in response to a current control signal. An X-ray detector detects the emitted X-rays and provides a detected X-ray signal indicative thereof to a control
5 system, which provides the current control signal. The X-ray detector provides feedback stabilization of the X-ray output from a source of X-rays, such as, for example an X-ray tube. The detector produces an electrical signal proportional to the X-ray output of the X-ray tube, and that signal is used to control the electron beam current in the tube in order to stabilize the X-ray output of the tube at a predetermined value.